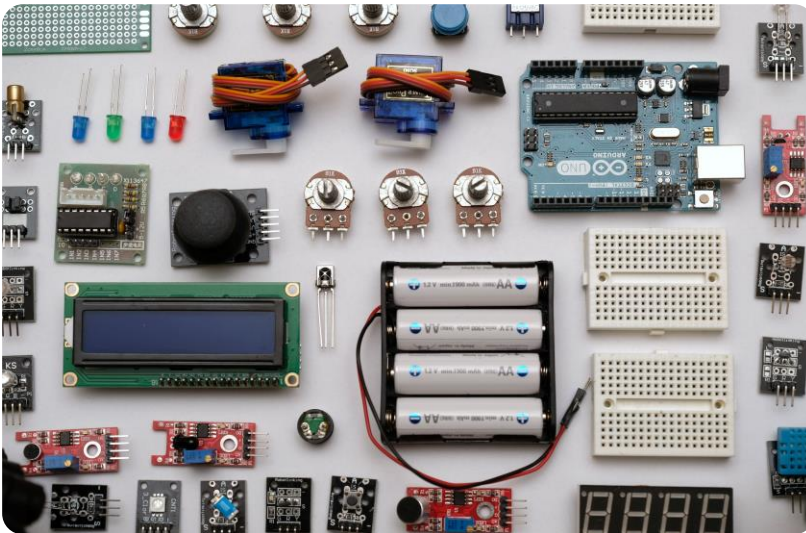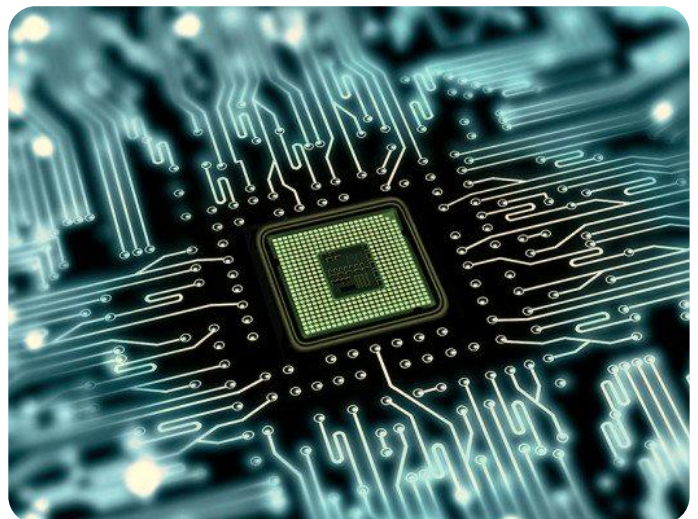# IOT FOR ELECTRONICS ENGINEERS

IoT applications are more effective with increasing density of field devices. The IoT field device is functionally made up of transducers computation chips, memory chips, communication chips, regulator chips and power supply. Advances in electronics is absolutely critical to push the limits on every one of those parameters. MEMS technology is being used for minimizing sensor/ actuator footprint and power consumption, while ceramic antennas reduce the RF footprint. Processing chips and communication chips are duty cycled to reduce battery consumption and increase system lifetime.

While some expensive IoT devices support an operating system, these devices trade off programming complexity with cost and therefore they may not be suitable for applications requiring volume deployments. In such cases the focus is on working with a proprietary toolchains to program the bare metal directly to and interface with the peripheral chipsets. This approach allows us to work with simpler chipsets which results in reduced bill of materials of the device.

Capsule Labs is founded by IoT industry veterans and offers foundational IoT projects to develop a better understanding of IoT solution. All our kits can be used for experimenting with peripheral interfacing and building embedded applications.